








Analysis of Contemporary Software's Materialization for Enterprise Resource Planning for SMEs in Amman Jordan: An Exploratory Research

Ahsan-ul Haque Shaikh^{1*}  | Hashem Al Almashaqbeh²  | Ali Raza³  | Hina Shaikh³ 
| Abdul Wajid Moorajo⁵ 

Abstract

The Enterprise Resource Planning (ERP) system is a very important component in the overall improvement of the performance of Small and Medium Enterprises (SME). The current research project focuses on ERP in (SMEs) in Amman, Jordan. It is a software system for operational purposes that incorporates various different subsystems in order to communicate the firms' strategic and operationally targeted activities. The information was gathered from Jordanian businesses from January 1st to February 3rd, 2023. The research is quantitative, and the descriptive research method is used to analyze the data, which is provided in the study as occurrence distribution tables created in the version 25.0 of SPSS. All of the effective measures, along with the results, convinced the SME concerning the firms, in addition to bringing its abilities in the direction of becoming a reality. The purpose of the current study is to shed light on the ERP system implementation on SMEs in Amman, Jordan; to reveal the challenges that Small and Medium firms in Amman, Jordan have faced as a result of implementing the ERP system; to comprehend the Co-relation and effectiveness of ERP system implementation on small-medium firms in Amman, Jordan by firm productivity; and to shed light on the ratio of business enterprises in Amman. The Kingdom of Jordan is in the process of materializing an ERP system in order to evaluate the productivity of work. The general findings revealed favorable outcomes, as well as the investigation of respondents' perspectives on important aspects

Keywords: Enterprise Resource Planning, Implementation, Small and Medium Enterprises, Performance.

JEL: L32, D04

Author's Affiliation:


Institution: University of Sindh, Jamshoro¹⁻⁴, Istanbul Okan University²⁻⁵, Near East University, Turkey³

Country: Pakistan, Turkey

Corresponding Author's Email: *ahsan.shaikh@usindh.edu.pk

The material presented by the author(s) does not necessarily portray the view point of the editors and the management of the ILMA University, Pakistan.

(Online) 2409-6520 (Print) 2414-8393, published by the ILMA University, Pakistan.

This is open access article under the  license. <https://creativecommons.org/licenses/by/4.0/>

1. INTRODUCTION

Enterprise Resource Planning (ERP) mechanism is performed via Technology-software (s). The enterprise performance can embrace project management, supply chain maneuvers, procurement, peril administration, acquiescence, and accountancy. ERP is significant in the current era since it effectively eliminates cost diminution and hindrances (Reese, 2020). The operational effectiveness of the firms advanced, leading to ERP structure execution (Madanhire & Mbohwa, 2016). In addition, ERP is explored as an instrument for economics in industry, I-e, insurance (Kumar, 2018). It involves ERP for project management applications in system projects (Vasiljeva & Berezkina, 2018). The illuminating case enfolded ERP is systems amalgamation (Jirava & Toseafa, 2017). The crucial managed inventory is operational within the enterprise resource planning (ERP) systems implementation of a corporation. The system consolidates all business operations into a single platform, resulting in a reduction in manual labor and the potential elimination of inefficient work processes. The organization possesses the authorization to monitor its current performance regarding its productivity and efficiency through dashboards available in the software provided by ERP systems.

Integration of business actions is feasible to administer in the course of ERP in practice (Perkins, 2020). ERP animatedly modifies operating models within organizations (Matende & Ogao, 2013). The system's environment relates mechanized business processes comprehensively, segregates shared data directed toward the organization, and, more importantly, constructs synchronized information or data (Spathis and Constantinides, 2004). Eventually, its discharge is helped in suppliers' recitals will pave the way for Firms' operational and financial performances (Sadrzadehrafiei, 2013). American firm via Beta in Amman, Jordan, ERP implementation foot stepped in 2000 through an official MoU of without-charge trade with the US. It employed a North American software enterprise, Omega, and its firm, e-MAG, to sprint ERP in encouragement from American firms, using it in their businesses to acquaintance conducive business affiliations with American enterprises in importing and exporting goods. It spotlighted Human Resources, Supply chain, and Financial Modules (Hawari, 2000).

1.1 Research Objectives

- To unfold the obstacles Small & Medium entities encountered in Amman–Jordan in materializing the ERP Mechanism.
- To explore the association and efficacy between ERP system execution for MEs firm's efficiency in Amman, Jordan.
- To evaluate the correlation and effectiveness of ERP systems mechanism accomplishment for SME entities in Amman, Jordan, concerning operational performance.
- To calculate the ratio of business organizations in Amman, Jordan, currently materializing the ERP method to assess productivity.

2. LITERATURE REVIEW

In the 21st century, they created legroom, significance, and success criterion for ERP systems to amalgamate a company's procedures and data on various applications via an essential database (Davenport, 1998). ERP is significant in the new era as it eliminates cost-minimality and impediments (Reese, 2020). About outfitted efficiency of the entities enhanced via ERP systems executions is beneficial for businesses (Madanhire&Mbohwa, 2016). ERP is additionally unfolded as a financial tool in an industry like; insurance (Kumar, 2018). It is further established to acquire ERP for project management practices in system projects (Vasiljeva&Berezkina, 2018). The descriptive case study resulted that ERP finding was effective in systems amalgamation (Jirava&Toseafa, 2017).

2.1 Resource Planning: Strategic Benefits,

ERP systems and its Functional level, and Information/data criteria (at Divisional/ Departmental at Corporate level) Management should acquire the support of Out-Resourced practitioners for evaluation criteria rationale. Since soft wares are helpful and may satisfy the individual Module needs, it will ameliorate the probability of successful ERP implementation (Muscatello, 2020).

2.2 Small & Medium Companies in Amman, Jordan:

SMEs are enterprises that keep Earnings, Assets, or Workforce numbers below a certain threshold. Medium-Enterprise (SME) is defined by the countries on their own. SMEs perform a significant Role in the Economy, Employment-Opportunities, and shaping innovation. Governments regularly provide incentives, including Preferential-Tax treatment and loans convenient access to help keep them in business (Raza et al., 2021). The revolt of the Arab and the international pecuniary and fiscal Downturn negatively impacted Jordan's economy. It depicted the demands for an added fair playing field and justice regarding contact with fiscal and societal openings. Jordan has also faced escalated unemployment when offering jobs annually to more than 60,000 young people entering the labor market. Adolescence and female were impacted mainly by joblessness at 22.8% & 22.3%, respectively. In addition, Regional-Discriminations persist in the pretense of added obstacles. Few jobs in the private sector are vacant in distant governorates, where employment is based hugely on Civil services and other jobs in the public sector.

Similarly, the private sector is an obstacle facing challenges in Market-Climate adding a lack of contact to finance. Work formation and economic enclosure are vital priorities for Jordan today by enhancing Access to Finance, Ornamental-Productivity, and nurturing Sustainable Private-sector growth (Nofal., 2015). Jordan's economy is primarily viewed as a small and medium-sized economy in which SMEs contribute to 98%, and the Workforce contributes 60% of Jordanian enterprises through SMEs Employment, with a total output accounting for around 50% of GDP. The small and medium-sized enterprises sector has faced numerous challenges that have started to grow into a Highly-Free and Open-Market Economy in Jordan. This paper demonstrates this to measure how small and Medium-sized

firms can decrease the unemployment dilemma in all countries and to view Jordan as a case study (Khaled et al., 2019).

2.3 ERP Implementation in Jordanian SMEs:

The researcher is well-known that the implementation of the ERP is not only effective when it is planned to be in huge organizations. Small & Medium-Sized Enterprises will also advantage equally from introducing the ERP (Smadi D.Z, 2016). ERPs may offer more power, coherence, and transparency to a firm, but only a few empirical studies fill this void in the impact of ERPs on Organizations. When Management help is acquired, the ERP will become a Central-Alignment tool, complement accounting and controlling functions and improve organizational performance (Dumitru et al., 2013). Control of an undertaking ensures that it is carried out according to the strategy espoused, the instructions given, and the principles laid down. Its object is to point out errors in arranging to get corrected and prevented from repeating (Fahmi, 2018). Even within a progressive organization, a New-type of the molecule may produce unforeseen events and difficulties (Lacki& Eriksson, 2018). in the end, deduct the latter from the first number. This difference is protection stock number-in items/units. Professional stock management requires amalgamating these two techniques, EOQ and Reorder Time. One of the rewards of inventory management systems is that they demeanor these measurements automatically, and all they have to do is turn on automated notifications-the device will update them automatically when they Reorder time and quantity (Lin, 2010).

ERP systems have received special acknowledgment from all sizes of firms and have been adopted by thousands of entities worldwide (Oracle, 2020). The more precise areas with high positive results under the ERP systems implementation in Egypt have been highlighted as; High-Production in lower-time duration, convenience in Time-Management and daily routines workload, improved information management, effectual Departmental-Work Integration, services augmentation, Customers Satisfaction and effective communication systems (Haddara, M&Elragal, 2011). Small & Medium Enterprises inhabit a very high impending place in Jordan's Economic Development with critical assistance to its GDP. Their performances are, therefore, very closely investigated. The World Bank reports showing Jordan as the 4th Best Place for the Business -Environment in the Middle East and North Africa, as reported in 2013. Jordan forges an environment for business investors to do business at a lesser cost of doing business in assessment to the rest of the region's countries. Jordan is a straightforward process of contributing to the investors to initiate a new business in its jurisdiction. However, it diverges from one type of business to another (JYES, 2012). It varied with the capacity of trained employees on ERP functioning. However, it could also be predictable that the firms would keep an advantage by implementing ERP systems with enhanced capability on its functions in the coming times (Smadi, 2016). However, the ERP system's successful implementation for improved organizational performance has been recommended. The effectiveness of using ERP systems in the Jordanian context is associated with well-equipped users with acceptance and clarity on its impacts within the organizational environment (Jones et al., 2006). However, the environmental pressure in ERP adoption restriction was not correlated with factors

in the study's results. The research based on ERP implementation in Jordanian SMEs will pave the way for improved organizational performance through improved operational areas (Lutfi, 2020). The outcome has shown that many manufacturing companies. They have enjoyed many advantages from the structures introduced to them, although some others have been met with them. Challenges in implementing the ERP as advantages have yet to be recognized immediately but can be seen in the ERP future. The researcher noted that implementing the ERP is not only effective when it is planned to be in Large Organizations. Small & Medium-sized Enterprises will add advantages equally from introducing the ERP (Smadi D.Z, 2016).

3. RESEARCH DESIGN & METHODOLOGY

The research is built on expressive mode. The present study is generally considered for testing the soundness of data in providing with added completed understanding of tested data.

3.1 Research Design

The research design for this study was a deductive reasoning approach concerned with developing an existing theory-based hypothesis; this work often deals with the estimation and counting of the occurrence of a particular population and provides an accurate image of a situation. In this research, the authors aimed to identify the main barriers at SMEs in Jordan-face (Al-Hyari, 2013).

3.2 Sample and Sampling

The data was obtained from senior managers, mid-level managers, ERP experts, and employees affiliated with the respective organizations. The sample size was determined using a prescribed formula for sampling, and the Amman Chamber of Commerce was visited to collect data from the respondents. The data was gathered during the period from January 1, 2023, to February 3, 2023. Sampling Size 47,587 is the figure of Small-Medium companies in Amman, Jordan, by official Emails acquired from the Chamber of Commerce and Industry of Amman.

The following equation is materialized and is of 269 respondents currently.

N (size of population) = 47,587, Z (confidence level) = 1.645, e (marginality of Error) = 0.05, and P (sample Proportion - uncertain) = 0.5.

$$\text{Sample size, } n = N * \frac{\frac{Z^2 * p * (1 - p)}{e^2}}{[N - 1 + \frac{Z^2 * p * (1 - p)}{e^2}]}$$

4. DATA ANALYSIS AND DISCUSSIONS

Analysis for this research study was done through the process. Firstly, the data collected is analyzed by the SPSS 25.0 version, and descriptive statistics are utilized by displaying mean points and deviation points on all demographic questions.

Table 1: Gender

		Occurrence	%	Valid%	Cumulative %
Valid	Male	196	71.8	71.8	71.8
	Female	77	28.2	28.2	100.0
	Total	273	100.0	100.0	

Table 1 describes the division of respondents. 196 out of 273 are males who have filled out the questionnaire, while 77 out of 273 are females who have responded, respectively

Table 2: Number of employees

		Occurrence	%	Valid %	Cumulative %
Valid	1-19	21	7.7	7.7	7.7
	20-49	97	35.5	35.5	43.2
	50-100	102	37.4	37.4	80.6
	100 +	53	19.4	19.4	100.0
	Total	273	100.0	100.0	

Table 2 represents the number of employees in some organizations has one to nineteen groups having an occurrence of 21 with 7.7 %, twenty to forty-nine has 97 occurrences having 35.5 %, fifty to hundred employees working in 102 firms having High-% up to 37.5, which means they possess average employees mostly medium size of business and some organizations have 100 + employees having 53 frequency having 19.4%.

Table 3: Manufacturing process

		occurrence	%	Valid%	Cumulative%
Val-id	Full process	124	45.4	45.4	45.4
	Sub-contractor	21	7.7	7.7	53.1
	Non	128	46.9	46.9	100.0
	Total	273	100.0	100.0	

Table 3 for item No. 3 depicts firms carrying a comprehensive manufacturing process consequences as a complete process; occurrence%, 45.4.valid-% 45.4 & cumulative% 45.4. Sub-contractor; occurrence 21. %, 7.7, valid-%7.7 & cumulative-% 53.1.Non; occurrence 128%, 46.valid-% 46.9 & cumulative-%100.0. Total; occurrence 273%, 100.0, valid-% 100.0. Data analysis revealed that the respondents' non-option and full-process preferences were influenced by the presence of companies that have access to the entire production process. Therefore, the third feature was the most stable in the estimation.

Table 4: Years in operation

		occurrence	%	Valid %	Cumulative%
Val-id	0-5 years	144	52.7	52.7	52.7
	6-10 years	107	39.2	39.2	91.9
	11-25 years	22	8.1	8.1	100.0
	Total	273	100.0	100.0	

Study consequences table 4 for item No. 4 depicts the entities with years in operation consequences as 0-5 years; occurrence 144. 52.7. valid-% 52.7, cumulative-%52.7. For 6-10 years; occurrence 107. %, 39.2, valid-% 39.2 & cumulative-% 91.9. For 11-25 years; occurrence 22. %, 8.1.valid-% 8.1 & cumulative% 100.0.Total; occurrence 273.% 100.0.Valid% 100.0. The data evaluation and its interpretation on that the firms with years in operation consequences most of the respondents replied on 0-5 years choice and secondly on the second alternative. So the estimation remnants most with the first characteristic for the item.

Table 5: ERP system availability

		occurrence	%	Valid %	Cumulative%
Val-id	Yes	273	100.0	100.0	100.0

Assessment Outcomes Companies that used ERP systems had the following success rates (all shown in Table 5's Item No. 5's corresponding column): Yes, occurrence 273.% 100.0, valid% 100.0, and cumulative-% 100.0. When it came to determining whether or not the companies had adopted the ERP system, the analyzed and interpreted data was unanimously favorable.

Table 6: Reasons for implementing an ERP

		occurrence	%	Valid%	Cumulative%
Val-id	Financial requirement	189	69.2	69.2	69.2
	Marketing purpose	74	27.1	27.1	96.3
	Other	10	3.7	3.7	100.0

Study outcomes Table 6 for item No. 6 depicts reasons for implementing an ERP system produced as Financial Requirement; occurrence 189—% 69.2. Valid-% 69.2 and cumulative% 69.2. Marketing purpose; occurrence 74. Percent 27.1. Valid % 27.1 and cumulative % 96.3. Other; occurrence 10.% 3.7. Valid% 3.7 & cumulative-% 100.0. Total; occurrence 273.% 100.0. Valid % 100.0. The data analysis and its interpretation for implementing an ERP system resulted in most of the respondent's replies on financial requirement alternatives and secondly on marketing purpose selection. Hence the opinion remained the most with the first attribute for the item.

Table 7: Difficult ERP implementation process

		occurrence	%	Valid %	Cumulative%
Val-id	Easy	79	28.9	28.9	28.9
	Challenging	164	60.1	60.1	89.0
	Difficult	28	10.3	10.3	99.3
	Extremely difficult	2	.7	.7	100.0
	Total	273	100.0	100.0	

Investigation outcomes Table 7 for item No. 7 depicts firms found the implementation process resulted as: Easy; occurrence 79. % 28.9. Valid %28.9 & cumulative % 28.9. Challenging; occurrence 164. % 60.1. Valid% 60.1 & cumulative % 89.0. Difficult; occurrence 28.% 10.3.Valid% 10.3 & cumulative % 99.3. Extremely difficult; occurrence 2. % .7.Valid .7% & cumulative% 100.0.Total; occurrence 273. % 100.0.Valid % 100.0. The data evaluation & its interpretation that the Firms found the implementation process resulted in most respondents replying on challenging preference and the easy decision. Hence opinion remained the most challenging attribute for the item.

Table 8: Training to maintain the ERP system

		occurrence	%	Valid %	Cumulative%
Val-id	No	40	14.7	14.7	14.7
	Yes	233	85.3	85.3	100.0
	Total	273	100.0	100.0	

Investigation results table 8 for item No. 8 depicts that the entities had someone trained to uphold the system resulted as: No; occurrence 40. % 14.7.Valid % 14.7 & cumulative % 14.7. Yes; Frequency 233. % 85.3.Valid % 85.3 & cumulative-%100.0.Total; occurrence 273.100.0.Valid %100.0.

Table 9: How often does your company send employees to training?

		occurrence	%	Valid %	Cumulative%
Val-id	Regularly	86	31.5	31.5	31.5
	Whenever there is a need	187	68.5	68.5	100.0
	Total	273	100.0	100.0	

Inquiry results Table 9 for item No. 9 depicts how often firms sent employees to training as Regularly; occurrence 86. % 31.5. Valid %31.5 & cumulative % 31.5. Whenever there is a need, occurrence 187. % 68.5. Valid % 68.5 and cumulative % 100.0.Total; Frequency 273.% 100.0.Valid % 100.0. The analysis and interpretation of the data regarding the frequency at which firms send staff for instruction revealed that the majority of those polled centered their choices on the perceived importance and consistency of such training opportunities. Therefore, the prevailing viewpoint emphasized the significance of need-based attributes for the item.

Table 10: Training period

		occurrence	%	Valid %	Cumulative %
Val-id	One week	26	9.5	9.5	9.5
	2 weeks	106	38.8	38.8	48.4
	One month	85	31.1	31.1	79.5
	More than one month	56	20.5	20.5	100.0
	Total	273	100.0	100.0	

Study results in Table 10 for item No. 10 depict that the suggested training period was one week, occurrence 26. % 9.5. Valid % 9.5 & cumulative% 9.5.2 weeks; occurrence 106.% 38.8.Valid % 38.8 & cumulative% 48.4.1 month; occurrence 85.% 31.1.Valid % 31.1 & cumulative% 79.5.More than one month; occurrence 56.% 20.5.Valid % 20.5 & cumulative % 100.0.Total; Frequency 273.% 100.0.Valid % 100.0. The data analysis and its interpretation of recommended training-period responses resulted in most respondents' replies on two weeks duration and secondly on the 1-month attribute. Hence the opinion remained mixed on a moderate level of durations for the item.

Table 11: Effectiveness of the ERP system

		occurrence	%	Valid %	Cumulative%
Val-id	High	235	86.1	86.1	86.1
	Average	36	13.2	13.2	99.3
	Week	2	.7	.7	100.0
	Total	273	100.0	100.0	

Investigation results in Table 11 for item No. 11 depict that the ERP system was effective, resulting in a High; occurrence of 235. % 86.1. Valid % 86.1 & cumulative- % 86.1. Average; occurrence 36. % 13.2. Valid % 13.2 & cumulative % 99.3. Week; Frequency 2. % .7. Valid % .7 & cumulative % 100.0. Total; occurrence 273. % 100.0. Valid % 100.0. The data analysis and its interpretation that the ERP system was effective responses resulted in highly positive responses from the management of the enterprises.

Table 12: Type of company plan

		occurrence	%	Valid %	Cumulative %
Valid	Marketing Plan	49	17.9	17.9	17.9
	Marketing plan, Succession plan	12	4.4	4.4	22.3
	Production plan	14	5.1	5.1	27.5
	Production plan, Marketing plan	6	2.2	2.2	29.7
	Production plan, Quality plan	8	2.9	2.9	32.6
	Production plan, Quality plan, Marketing plan	36	13.2	13.2	45.8
	Production plan, Quality plan, Marketing plan, Succession plan	4	1.5	1.5	47.3
	Quality plan	36	13.2	13.2	60.4
	Quality plan, Marketing plan	16	5.9	5.9	66.3

Quality plan, Marketing plan, Succession plan	4	1.5	1.5	67.8
Strategic Plan	10	3.7	3.7	71.4
Strategic plan, Marketing plan	8	2.9	2.9	74.4
Strategic plan, Marketing plan, Succession plan	7	2.6	2.6	76.9
Strategic plan, Production plan, Quality plan, Marketing plan, Succession plan	37	13.6	13.6	90.5
Strategic plan, Quality plan	3	1.1	1.1	91.6
Strategic plan, Quality plan, Marketing plan	8	2.9	2.9	94.5
Succession plan	15	5.5	5.5	100.0
Total	273	100.0	100.0	

St results in table 12 for item No. 12 depict that the companies had plans resulting as Marketing plans; occurrence 49—% 17.9.Valid% 17.9 & cumulative% 17.9. Marketing plan, succession plan; occurrence 12%4.Valid % 4.4 & cumulative% 22.3.Production plan; occurrence 14.% 5.1.Valid % 5.1 & cumulative-% 27.5.Production plan, marketing plan; occurrence 6.% 2.2.Valid% 2.2 & cumulative% 29.7. Production plan, quality plan; occurrence 8.% 2.9.Valid% 2.9 & cumulative% 32.6. Production plan, quality plan, marketing plan; occurrence 36.% 13.2.Valid% 13.2 & cumulative% 45.8. Production plan, quality plan, marketing plan, succession plan; occurrence 4.% 1.5.Valid% 1.5 & cumulative% 47.3. Quality plan; occurrence 36.% 13.2.Valid% 13.2 & cumulative% 60.4. Quality plan, marketing plan; Frequency 16.% 5.9.Valid% 5.9 & cumulative% 66.3. Quality plan, marketing plan, succession plan; Frequency 4.% 1.5.Valid% 1.5 & cumulative% 67.8. Strategic plan; occurrence 10.% 3.7.Valid% 3.7 & cumulative% 71.4. Strategic plan, marketing plan; occurrence 8.% 2.9.Valid% 2.9 & cumulative% 74.4. Strategic plan, marketing plan, succession plan; occurrence 7.% 2.6.Valid% 2.6 &

cumulative% 76.9. Strategic plan, production plan, quality plan, marketing plan, succession plan; occurrence 37.% 13.6.Valid% 13.6 & cumulative% 90.5.Strategic plan, quality plan; occurrence 3.% 1.1.Valid% 1.1 & cumulative% 91.6. Strategic plan, quality plan, marketing plan; occurrence 8.% 2.9.Valid% 2.9 & cumulative% 94.5. Succession plan; Frequency 15.% 5.5.Valid% 5.5 & cumulative% 100.0 Total; Frequency 273.Percent 100.0.Valid-Percent 100.0.

Table 13: Encourage staff development

		occurrence	%	Valid %	Cumulative%
Val-id	No	16	5.9	5.9	5.9
	Yes	257	94.1	94.1	100.0
	Total	273	100.0	100.0	

Study results table 13 for item No. 13 depicts that the enterprises encouraged staff development as: No; occurrence 16. % 5.9. Valid% 5.9 & cumulative-%5.9. Yes, occurrence 257. % 94.1. Valid% 94.1 & cumulative% 100.0. Total; occurrence 273.%100.0. Valid% 100.0. The data analysis and its interpretation that the organizations encouraged staff development resulted in very high positive responses from the management of the companies.

Table 14: Encourage Teamwork

		occurrence	%	Valid %	Cumulative %
Val-id	No	16	5.9	5.9	5.9
	Yes	257	94.1	94.1	100.0
	Total	273	100.0	100.0	

Analysis results table 14 for item No. 14 depicts how often enterprises encouraged Teamwork resulted as: No; occurrence 16. % 5.9. Valid% 5.9 & cumulative % 5.9. Yes, occurrence 257. % 94.1. Valid % 94.1 & cumulative% 100.0. Total; occurrence 273.%100.0.Valid % 100.0. The data analysis and its interpretation of how often enterprises encouraged Teamwork resulted in very high positive responses by the management of the companies

5. CONCLUSION

The Overall results depicted Positive consequences and the study of replies on significant facets. Since the study unfolds and highlights that about 50 replying firms possess complete manufacturing processes materializing the ERP systems for an additional Five years. The entire responding enterprises revealed applying the ERP system, and most firms foundmaterializing viaAlAmeen& SAGE or

Sypris software frequently. Additionally, 50% of the firms explored materializing the systems for the firm's financial evaluations. The testing results additionally the exploration of the firms revealed ERP systems as an Effectual and Effective mechanism in assessing the dependability of process development, Processes-Responsiveness, Flexibility,& Significant in Utility maximization for Control of the Overall Cost, Efficient Resources-Management Processes for the contemporary Business-Enterprises in advance and the highly competitive domestic and the Global Business-Environment.

5.1 RECOMMENDATIONS

- ERP systems implementation may lead to available tools in the organizational proficiency of Enterprises.
- All managerial and compliance personnel can give mainly recurrent capacity-building prospects on ERP systems implementation.
- ERP materializes as an instrument in revolving the firms into a complete manufacturing process.
- SMEs may benefit from entire assistance via ERP while making it part of the firm sustainable business strategies.
- Added rationalized descriptions of the software can lead to tests complying with the best appropriate needs of firms in specific.
- As most of the firms explored ERP implementation challenges, more studies are mandatory to develop simple and accessible to all entities worldwide.

Competing Interest

It is declared that the authors of this research have no competing interests.

Availability of data and materials

The sources of data have been duly mentioned in the study.

Funding

None, no fund received.

Author's contribution

AHS, AR: Conceptualization, Methodology, Formal analysis, Writing Original Draft. TQ, ARA: Data Curation, Writing Original Draft, Writing - Review & Editing, Investigation.

Acknowledgments

Not applicable.

REFERENCES

- Al-Hyari, K (2013). Identification of Barrier Factors and Potential Solutions to SMEs Development among Jordanian Manufacturing Sector, *International Journal of Business and Management*, 8. (24), 1–9.
- Fahmi, Y. (2018). “Analysis of Enterprise Resource Planning (ERP) Implementation in SMEs in East Kalimantan Indonesia.” *Global Journals*. Vol 18 (2018).
- Haddara, M., & Elragal, A. (2011). *ERP Lifecycle: When to retire your ERP system*. Researchgate.
- Hawari, A & Heeks, R. (2020). “ Explaining ERP failure in a developing country: A Jordanian case study.” *Journal of Enterprise Information Management*: pp. 135–160.
- Jirava, P, &Toseafa, E. (2017). “ An illustrative case study of the integration of Enterprise Resource Planning System” *Journal of Enterprise Resource Planning Studies*. 2017.
- Jones, M.C. & Young, R. (2006). “ERP usage in practice: an empirical investigation,” *Information Resources Management Journal*, Vol. 19 No. 1, pp. 23–42.
- JYES. (2012). “ Research Study on Strengthening Small and Medium Enterprises in Jordan” *Jordanian Young Economists Society*.
- Kamhawi, E.M. (2008). “Enterprise resource-planning systems adoption in Bahrain: motives, benefits, and barriers,” *Journal of Enterprise Information Management*, Vol. 21 No. 3, pp. 310–334.
- Khaled, A., Al-Tamimi, M., & Jaradat, M. S. (2019). *The Role of Small Medium Enterprises in Reducing the Problem of Unemployment in Jordan*. Researchgate.
- Kumar, B. (2018). “ Impact and Need for Financial Transformation in the Insurance Industry using ERP.” *Journal of Enterprise Resource Planning Studies*, Vol. 2018 (2018).
- Lacki, K. M., & Eriksson, K. O. (2018). *Downstream Process Design, Scale-up Principles, and Process Modeling*. Biopharmaceutical Processing.
- Lin, H.F. (2010). “An investigation into the effects of IS quality and top management support on ERP system usage,” *Total Quality Management*, Vol. 21 No. 3, pp. 335–349.
- Lutfi, A. (2020). *Investigating the moderating role of environmental uncertainty between institutional pressures and ERP adoption in Jordanian SMEs*. MDPI.
- Madanhire, I. & Mbohwa, Charles. (2016). *Enterprise Resource Planning (ERP) in improving operational efficiency: Case Study*. 13th Global Conference on Sustainable Manufacturing-Developing Growth from Resource Use.

- Matende. S., & Ogao. P. (2013). Enterprise Resource Planning (ERP) System Implementation: A Case for user participation. International Conference on Project Management/HCIST 2013.
- Muscatello, J. R., & Chen, I. J. (2008). Enterprise Resource Planning (ERP) Implementations: Theory and Practice. International Journal of Enterprise Information Systems, 63-83.
- Nofal, M. I. (2015). critical success factors enhancing enterprise resource planning systems implementation in Jordanian SMEs. The 5th International Conference on Electrical Engineering and Informatics, 4–7.
- ORACLE. (2020, February 4). Oracle Enterprise Resource Planning (ERP). Retrieved 2020, from ORACLE: www.oracle.com/erp/
- Perkins, B. (2020). “What is ERP? Key features of top enterprise resource planning systems” CIO: www.cio.com/article
- Raza, A., Almashaqbeh, H. A., & Bhatti, K. R. (2021). Impact of Price, Service, Environment and Facilities on Customer Satisfaction in Beauty Parlors: A Case of Istanbul Turkey. IBT Journal of Business Studies (JBS), 17(2).
- Reese, H. (2020). “Top 10 ERP vendors in 2020”. Tech Republic: www.techrepublic.com/article/top-10-erp-vendors-in-2020.
- Reinbolt, M. (2019). Benefits of ERP: Advantages and Disadvantages of an Enterprise Resource Planning System. Retrieved 2020, from SelectHub: www.selecthub.com
- Sadrzadehrafie, s. (2013). The benefits of ERP system Implementation in the Dry food packaging industry. The 4th international conference on electrical engineering and Informatics (pp. 223–230). Malaysia: Procedia technology.
- Smadi, A. (2016). The Operational Benefits of ERP: A Case Study on Jordan’s food processing and manufacturing companies. Scholars.
- Smadi, D. Z. (2016). The Operational Benefits of Enterprise Resource Planning (ERP): A Case Study on Food Processing and Manufacturing Companies in Jordan. International Journal of Business and Social Science.
- Spathis, C., & Konstantindou, S. (2003). The usefulness of ERP systems for effective management. Industrial Management and Data Systems, 677-685.
- Vasiljeva, T, & Berezkina, E. (2018). “Determining project Management Practices for Enterprise Resource Planning System Projects” Journal of Enterprise Resource Planning Studies.